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Monthly Statistical Report

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SUMMARY

Total deliveries, following several months of year-to-year increases and an only-slight decline in September, fell substantially in October. The decline indicates that a demand response to higher petroleum prices over the past three months is becoming apparent, though we believe that the decline in underlying consumption was probably less than the drop in deliveries. This would reverse the experience of recent prior months, when part of the deliveries increases for some products likely represented additions to inventories of distributors and end users rather than increases in actual consumption. The decline of 4.9 percent, or roughly 850 thousand B/D, contrasts with an estimated underlying trend earlier in the year of perhaps a half percent decline. The drop in actual consumption was probably about half of the month's deliveries decrease.

All major products except kerosine jet fuel shared in the deliveries decrease. October's gasoline deliveries followed September's estimated 1.5 percent decline with a 2.7 percent decrease, while distillate deliveries' 5.5 percent drop contrasted with increases averaging nearly 5 percent over July through September. Residual fuel oil deliveries were off by over 22 percent. Deliveries of kerosine jet fuel, however, jumped 9.5 percent, continuing their substantial strength of the past several months. Kerosine jet fuel deliveries, running at levels among the highest ever, have been averaging nearly 7 percent higher than a year ago.

Domestic crude oil production declined only about 3 percent in October, compared with a rate of about 6 percent or 450 thousand B/D earlier in the year. Alaskan production actually rose slightly, in contrast to its earlier decline trend of 90-100 thousand B/D, as the summer's maintenance and enhancement programs on the North Slope were completed and as an accelerated well fracturing program continued. Lower 48 production declined 4.1 percent or about 230 thousand B/D, year to year.

Total imports fell close to 18 percent or 1.5 million B/D from a year ago for October. Crude oil imports were down over 900 thousand B/D as refiners continued to draw on crude oil inventories. All major products contributed to a decline in product imports, which fell by nearly one quarter to 1.6 million B/D.

With the slackening in deliveries, input to distillation units dropped 2.7 percent versus last October, following the strong levels of recent prior months. Output of kerosine jet fuel, however, rose more than 10 percent; smaller gains for gasoline and distillate were more than offset by a 21 percent decline for residual fuel oil.

Total stocks fell a greater-than-average 24 million barrels for October, with crude stocks dropping 9 million barrels. Over the past three months, crude oil stocks have been drawn down by 36 million barrels, or nearly 10 percent, but still exceed last year's level. Distillate stocks ended the month at 138 million barrels, about 9 million barrels above average for October.

PRODUCT SUPPLIED [1]

Gasoline

HIGHER PRICES DAMPEN DEMAND. The rise in U.S. retail gasoline prices over the past three months, though less than the increase for crude oil, has apparently been large enough to have a measurable effect on gasoline consumption—an effect reflected in October's deliveries. Following a 1.5 percent, year-to-year decline in September, gasoline deliveries dropped 2.7 percent in October to 7.1 million B/D. This was the lowest level of deliveries for October in five years. Deliveries had already averaged a lesser, 0.9 percent decline for the first seven months of this year, before supply interruptions and tensions in the Middle East led to substantial increases in petroleum prices worldwide.

U.S. retail gasoline prices for October, averaged over the month, were about 30 cents per gallon higher than before the Iraqi invasion (while crude oil prices averaged more than $19 per barrel, or around 45 cents per gallon, higher). Though one month's decline in deliveries could be the result of many sources of variation, we believe that October's greater-than-previous decrease largely reflects reduced demand in response to higher prices.

Further evidence is provided by recently-released data on travel during August. In the months prior to August, miles traveled had been running at around a 3 percent growth rate.

	API ESTIMATES OCTOBER		YEAR-TO-DATE	
	Million B/D	Percent Change	Million B/D	Percent Change
Total domestic deliveries	16.5	(4.9)	17.0	(1.2)
Crude production[v]	7.2	(3.0)	7.2	(5.6)
Total imports[v]	6.8	(17.9)	8.2	2.8
Stocks (million bbl)[v]	1,092	1.2	na	na

August's increase slipped to 2 percent, and preliminary indicators for September suggest a further dropoff in travel's growth rate.

Distillates

STRONG GAINS END, DELIVERIES FALL. Following several months of year-to-year gains in deliveries that exceeded any likely underlying consumption trend, October's distillate deliveries fell 5.5 percent, or about 175 thousand B/D. The contrast with the sizeable increases in prior months (averaging nearly 5 percent over the July-to-September period) is consistent with our belief that the previous growth reflected additions to the inventories of distributors and end users, rather than any substantial strength in underlying consumption. Similarly, October's deliveries' drop may have partly overstated the decline in actual consumption, assuming that nonprimary stocks, built up earlier in the season, rose less than usual during October.

Warmer weather was responsible for a small part of October's decline in deliveries. Though, for the U.S. as a whole, the month averaged only slightly warmer than a year ago, for the Northeast, the weather was 15 to 20 percent warmer than last October. The effect on heating oil consumption, however, would account for only about 50 thousand B/D of the year-to-year decline in distillate deliveries.

Higher prices (heating oil, for example, according to government data, averaged about $1.30 per gallon during October, versus a little less than 90 cents a year ago) have also undoubtedly encouraged conservation, though perhaps not by as much as the month's deliveries decline might suggest.

An article on distillate supply capability during the current heating season is included in the following pages of this issue of the *Monthly*.

Residual Fuel Oil

OFF OVER 22 PERCENT. Residual fuel deliveries fell 22.4 percent in October. The decline (coming despite 4-5 percent growth in nationwide electricity generation) is attributed both to fuel substitution, which was aided by mild weather in the East, and to large utility inventories of resid. Furthermore, the impact of the drop in oil imports during the month is believed to have softened demand for resid as a bunker fuel.

Both price and weather are important variables in a utility's fuel choice. The potential for price-induced fuel switching by electric utilities from resid to natural gas is often more limited during the fall and winter months. Gas supplies are usually diverted at this time for use in commercial and residential heating; consequently, utilities use more residual fuel. However, weather in New England and Mid-Atlantic states was 15-20 percent warmer than last October, and this is believed to have freed up supplies of the currently more economical natural gas for utility use.

Despite declining utility use of residual fuel over the first seven months of the year, buying was strong during the late spring and early summer when utilities were taking advantage of low prices. As a result, utility stocks nationwide were up more than 6 percent at the time of the Iraqi invasion, with larger builds coming in the high-use states of New York, Massachusetts and California. This increase in stocks contrasts with a roughly 20 percent decline in resid consumption by utilities for the year as of August 1. While more current data aren't available on utility fuel inventories, it is believed that these higher secondary stocks have allowed some utility buyers to stay out of spot markets (where prices were up 60-70 percent from the end of July).

The impact of lower levels of petroleum imports in recent months is being felt in bunker fuel markets. By weight, crude and petroleum product imports have represented two-thirds or more of all ocean-borne imports into the U.S. While some of the import decline since the invasion was offset by rebounding Alaskan production (also brought into U.S. mainland ports via tanker), ocean-borne shipments fell during the month and likely had a direct consequence on bunker fuel demand.

Kerosine Jet Fuel

STRONG DELIVERIES CONTRAST WITH OTHER PRODUCTS. Of major refined products, kerosine jet fuel was the only one to see an increase in deliveries during October. The 9.5 percent rate of growth was more than twice as large as the year-to-date average and, at 1,371 thousand b/d, deliveries were among the highest ever observed (with the exception of last December when product was diverted for blending with heating fuel). Still, given growth in airline miles flown and continued strong military demand, the deliveries increase was only 2-3 percent higher than what would have been expected based on estimated consumption.

Despite full-fare tickets which were 5-10 percent higher than in July, airlines were able to encourage domestic travel via a larger assortment of travel incentives. The result of more heavy discounting was that average ticket prices increased only 2-4 percent. Thus, there has yet to be a significant drop-off in passenger travel. Domestic passenger miles continued to grow during the month (albeit slowly); however, smaller load factors kept growth in aircraft miles flown on these routes in the 5-6 percent range.

Meanwhile, international travel continued to see robust growth despite higher fares. For the ninth time in ten months, international miles flown are believed to have seen double digit growth. This growth is somewhat surprising in light of weakening worldwide economic growth and a declining dollar. Against the British pound, for example, the dollar has fallen nearly 15 percent in five months. However, while a weak dollar hurts the purchasing power of U.S. travellers overseas, it makes it less expensive for foreign travelers coming here.

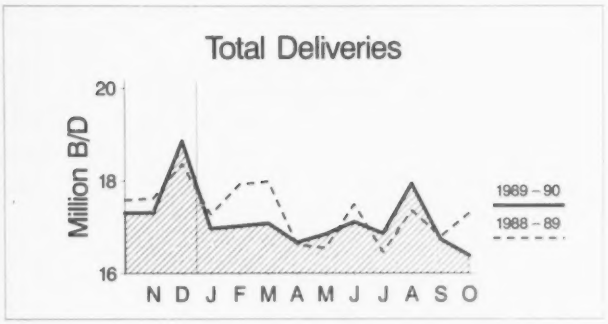
Domestic military deliveries are believed to have been up about 20 thousand b/d in October from pre-invasion levels due to larger draws on existing contracts. However, they likely fell from the high levels seen in September when supplemental contracts were used to restock inventories drawn down during the U.S. airlift to the Persian Gulf.

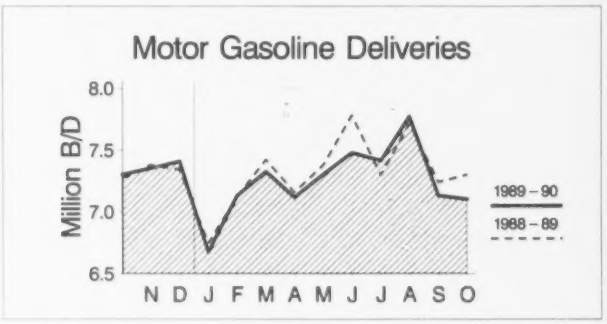
Growing airline travel, increased military demands, and the threat of war all served to bid up the price of jet fuel more rapidly than crude oil in late September and early October. However, after peaking in the second week of the month, spot jet fuel prices dropped by as much as 45 cents/gallon during the last two and a half weeks of October.

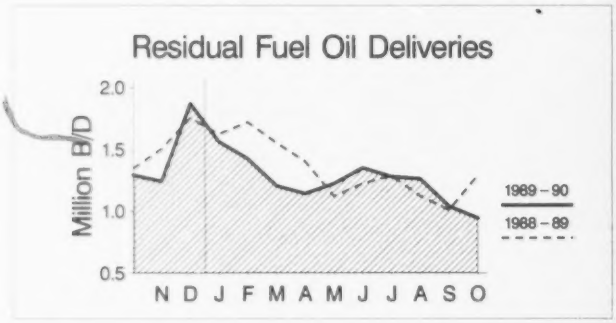
Other Oils

DOWN FOR SECOND MONTH IN A ROW.

Deliveries of other oils fell for the second month in a row, dropping 6.1 percent. Though deliveries had been increasing at a roughly 2 to 3 percent rate from April through August, the first quarter's largely weather-related decline of 6.3 percent, combined with the declines of the past two months, have left year-to-date deliveries down 1.5 percent versus a year ago.







SUPPLY [1/]

Production

ALASKAN GAIN MODERATES U.S. DECLINE.

Domestic crude oil production, which had been declining at a rate of about 6 percent or 450 thousand B/D earlier in the year, declined only about 3 percent or 220 thousand B/D in October. This was partly the result of a boost in Alaskan production as the summer's program of maintenance and enhancement of gas and water handling facilities on the North Slope was completed and as an accelerated well fracturing program continued.

Alaskan production, at nearly 1.9 million B/D, was up about 270 thousand B/D from June's low and was at the highest level since last December. Year to year, Alaskan crude oil output, compared with a decline trend of 90-100 thousand B/D earlier in the year, actually rose slightly—by 0.6 percent or about 10 thousand B/D. Production enhancements are estimated to have added 50-100 thousand B/D to October's figure.

Production in the lower 48 declined 4.1 percent or about 230 thousand B/D year to year, compared with declines earlier this year running at around 6 percent or 350 thousand B/D. It is as yet unclear how much of this estimated lesser decline represents a departure from the earlier trend in response to higher crude oil prices and how much is due to the inherent variability of the data. However, signs of increased drilling and well maintenance activity have become apparent in the past several months.

Imports

DOWN NEARLY 18 PERCENT.

Imports fell to 6.8 million B/D in October, down nearly 18 percent from a year ago and the lowest level in more than three years. Crude imports were down to 5.2 million B/D, more than 900 thousand B/D below a year ago as refiners continued to draw on domestic inventories.

Government deliveries of crude from the recent test sale of the Strategic Petroleum Reserve began in the latter part of October, though the bulk of deliveries are scheduled for November. Approximately 8 thousand B/D of SPR crude was delivered during October, with approximately 125 thousand B/D scheduled for November. It should be noted that API data, to better reflect day-to-day commercial activity, do not include imports for the SPR or stocks held in the SPR. Any deliveries of crude out of the SPR are included in the accompanying petroleum balance under "other supply".

October's product imports were down by nearly 560 thousand B/D, year to year, to 1.6 million B/D. All major products shared in the decline. Finished gasoline dropped to about 215 thousand B/D from about 390 thousand B/D a year ago. Reflecting weak deliveries, residual fuel oil imports dropped to 333 thousand B/D, off more than 40 percent from last October. Distillate imports declined less sharply, averaging about 215 thousand B/D for the month versus a little over 260 thousand B/D a year ago.

Recently-released data for August confirm that although product exports rose from prior levels in response to higher product prices outside the U.S., the increases were minor compared with the size of the domestic market. Gasoline exports, which have typically ranged from 30 to 60 thousand B/D over the past year or so, rose from about 40 thousand B/D in July to 77 thousand B/D in August—an increase amounting to about half a percent of the 7.8 million B/D supplied to the domestic market. The increment in exports went mainly to Mexico.

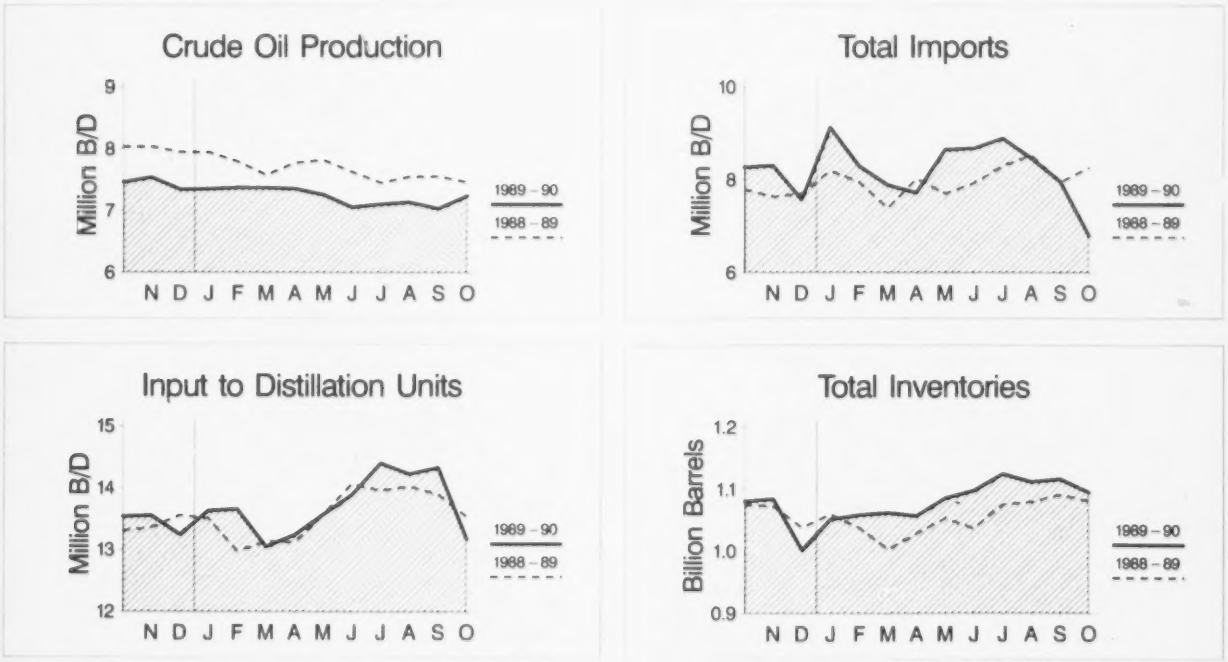
Refinery Operations

ACTIVITY PARALLELS DROP IN DELIVERIES. Input to distillation units, which had averaged 14.3 million B/D over July through September, or over 2.5 percent ahead of a year ago, declined to 13.2 million B/D in October. Though this was partly a reflection of typical seasonal patterns, the 2.7 percent year-to-year decline also reflected the month's weaker deliveries. Refinery activity typically drops in the fall in order to allow for turnarounds and maintenance between the periods of peak gasoline consumption during the summer and peak heating fuel needs during the winter. Utilization of reported capacity dropped to 84.5 percent from 86.1 percent a year ago, while utilization of capacity in actual operation is estimated to have been about 88 percent.

However, output of most major products rose except residual fuel. Kerosine jet fuel production, in particular, jumped 10.4 percent versus a year ago to over 1.4 million B/D, the largest amount ever produced in one month. Gasoline production rose 0.6 percent, and distillate output about 0.2 percent. Output of residual fuel oil, however, dropped nearly 21 percent.

Inventories

DISTILLATE STOCKS ABOVE AVERAGE. Declines for both crude and products brought the drop in total stocks to 24 million barrels during October. This was substantially more than the recent-year average decline of about 5 million barrels. Crude oil inventories, which dropped a further 9 million barrels during the month, have fallen 36 million barrels, or almost 10 percent since the end of July. At month-end they stood at about 344 million barrels, 6 million barrels above the 338-million-barrel average level of the previous five Octobers. Gasoline stocks declined 4 million barrels, about half their typical decline for October, to a level slightly above the previous-year average. Distillate stocks rose 4 million barrels to 138 million barrels—9 million barrels above the recent-year average.



1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 589 million barrels as of October 31, 1990).

ESTIMATED UNITED STATES PETROLEUM BALANCE
(Daily Average in Thousands of 42 Gallon barrels)

Products Supplied/Supply From Primary Storage	OCTOBER			YEAR-TO-DATE		
	1990[1]	1989[2]	% Change	1990[3R]	1989[2]	% Change
Products Supplied:						
Total motor gasoline	7,103	7,302	(2.7)	7,246	7,317	(1.0)
Finished leaded motor gasoline/*	358	659	(45.7)	409	878	(53.4)
Finished unleaded motor gasoline/*	6,745	6,643	1.5	6,837	6,439	6.2
Naphtha-jet	166	221	(24.9)	180	207	(13.0)
Kerosine-jet	1,371	1,252	9.5	1,305	1,253	4.2
Distillate fuel oil	2,954	3,127	(5.5)	3,038	3,064	(0.8)
Residual fuel oil	1,002	1,292	(22.4)	1,248	1,332	(6.3)
All other oils[4]	4,048	4,311	(6.1)	4,081	4,142	(1.5)
Reclassified[5]	-185	-201	(8.0)	-128	-145	(11.7)
Total domestic products supplied	16,459	17,304	(-4.9)	16,970	17,170	(1.2)
Exports	773	791	(2.3)	773	826	(6.4)
Total products supplied	17,232	18,095	(4.8)	17,743	17,996	(1.4)
Supply:						
Domestic production:						
Crude oil[6]	7,233	7,453	(3.0)	7,223	7,649	(5.6)
Natural gas liquids	1,472	1,478	(0.4)	1,498	1,572	(4.7)
Other supply[7]	975	558	74.7	1,072	893	20.0
Total domestic supply	9,680	9,489	2.0	9,793	10,114	(3.2)
Imports:						
Crude oil, total[8]	5,230	6,149	(14.9)	6,100	5,788	5.4
Canadian	645	590	9.3	642	636	0.9
Other	4,585	5,559	(17.5)	5,458	5,152	5.9
Products, total	1,557	2,115	(26.4)	2,147	2,232	(3.8)
Residual fuel oil	333	583	(42.9)	516	632	(18.4)
Other	1,224	1,532	(20.1)	1,631	1,600	1.9
Total imports	6,787	8,264	(17.9)	8,247	8,020	2.8
Total supply	16,467	17,753	(7.2)	18,040	18,134	(0.5)
Stock change, all oils	-765	-342	*****	297	138	*****
Refinery Operations						
Input to crude oil distillation units	13,170	13,533	(2.7)	13,714	13,582	1.0
Operable capacity	15,591	15,722	(0.8)	15,533	15,692	(1.0)
Refinery utilization (%)[9]	84.5	86.1	(1.9)	88.3	86.6	2.0
Crude oil runs	12,941	13,360	(3.1)	13,544	13,423	0.9

Stocks (millions bbls.)	1990		1989[2]	% Change from	
	Oct. 31[/10]	Sep. 30[/10]	Oct. 31	Previous Month	Year Ago
Crude oil[8]	343.8	352.4R	336.0	(2.4)	2.3
Unfinished oils	106.7	112.1	112.3	(4.8)	(5.0)
Total motor gasoline/**	221.1	224.7	222.5	(1.6)	(0.6)
Finished leaded motor gasoline/*	10.5	11.0	18.8	(4.5)	(44.1)
Finished unleaded motor gasoline/*	171.5	172.9	163.8	(0.8)	4.7
Naphtha-jet	6.5	6.1	6.3	6.6	3.2
Kerosine-jet	45.1	42.6	43.9	5.9	2.7
Distillate fuel oil	138.2	134.2	121.7	3.0	13.6
Residual fuel oil	49.7	51.1	50.9	(2.7)	(2.4)
All other oils	180.8	192.4R	186.1	(-6.0)	(2.8)
Total all oils	1,091.9	1,115.6R	1,079.7	(-2.1)	1.2

/1 Based on API estimated data converted to a monthly basis.
/2 Source: U.S. Department of Energy.
/3 Jan.-Aug.,DOE, Sept.-Oct., API.
/4 Includes crude losses.
/5 Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from the total domestic products supplied.
/6 API estimate; includes lease condensate.
/7 Includes Unaccounted-for crude oil, Processing gain and Field Production of other hydrocarbons and alcohol.
/8 Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
/9 Represents "Input to crude oil distillation units" as a percent of "Operable capacity".
/10 Derived by interpolating API weekly stocks data.
/R Revised.
/* Included in motor gasoline.
/** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.

DISTILLATE SUPPLY CAPABILITY

This article reviews supply capability for distillate fuel oil with respect to this heating season, given adequate supplies of crude oil. It concludes that, barring unforeseen disruptions, available supplies from refineries, primary inventories, and imports appear adequate to meet demand within ranges likely to be observed.

As demonstrated by last December's extraordinarily cold weather—very unlikely to recur this year—this is not an empty caveat. Though the refining and distribution system was taxed, the resulting exceptional surge in demand was supplied through the extraordinary efforts of participants in all parts of the industry.

Deliveries

Residential and commercial use accounts for about a quarter of distillate fuel oil deliveries, on an annual basis—but is the main reason for the seasonal variation in distillate deliveries, which have averaged half a million B/D higher in the October-March period than in the other six months of the year. Other uses include consumption by highway vehicles and by other modes of transportation, as well as industrial, farm, off-highway, and electric utility uses.

Deliveries for the first ten months of this year have averaged a decline of about 1 percent, or if adjusted for warm winter weather early in the year, have risen only slightly. These figures include the unusually strong deliveries of August and September, as well as October's unusually large drop—which we believe were more the result of changes in stocks held by distributors than of large fluctuations in actual consumption. As for the current heating season, API does not forecast demand, but the Department of Energy's recent Short-Term Energy Outlook (September issue) provides a representative range of projections.

The Energy Information Administration's projections range from 3.27 to 3.40 million B/D for the season, with a middle case of 3.34 million B/D. (The heating season here is defined as October through March.) We estimate that an extremely cold winter— specifically, one which would have only a 5 percent chance of occurring—would add about 90 thousand B/D to demand over the heating season. Obviously, over shorter periods, the effects of cold weather could be greater. Adding this to the range already mentioned yields figures for deliveries—in the event of a cold winter—running from 3.36 to 3.49 million B/D. Based on historical seasonal patterns, average deliveries for the remainder of this season—November through March—work out to nearly the same levels.

Refineries

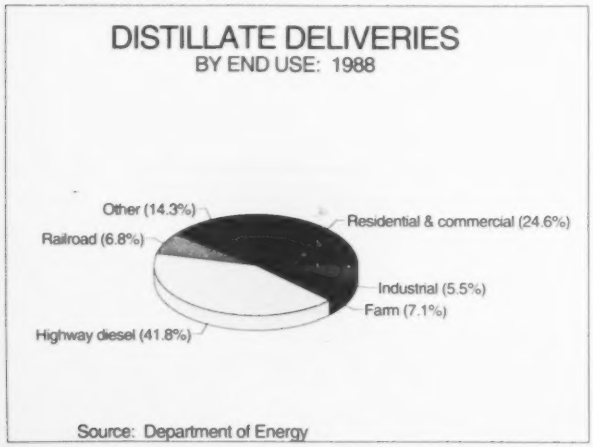
In recent years, current refinery production has supplied most of the fuel oil used during the heating season—88 percent, on average, over the past five seasons. Only about 4 percent has come from inventories, while the rest has been supplied from net imports. Refineries have already been turning out distillate at high rates over the past few months. Since May, U.S. refineries have been producing an average of 3.0 million B/D, about 4 percent above the year-ago period and among the highest levels for a similar period since the late 1970s.

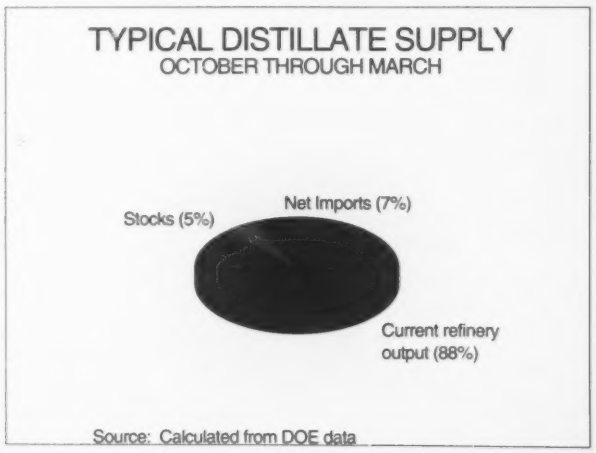
A conservative estimate of what refineries are able to produce can be derived from historical observation. For example, for the past five seasons, the highest distillate fuel oil yield for October through March (as calculated on input to distillation units) was 23.3 percent. Since this is calculated over a period which includes the lower-demand months, when yields are also typically lower, it is, in fact, reasonably conservative. Over the remainder of the season, refinery runs averaging 14.0 million B/D, though quite strong, would allow for necessary turnarounds and downtime for normal maintenance and repairs.

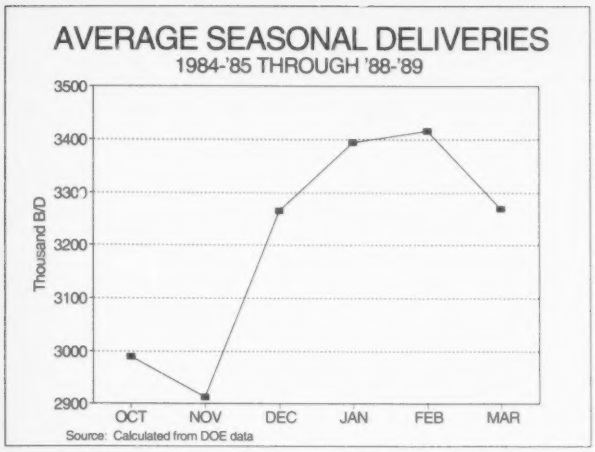
Based on these figures, supply capability from refineries is estimated at 3.26 million B/D. Higher levels of output could, at least in theory, be achieved, particularly for short periods. However, an extreme shift towards distillate over a prolonged period could significantly hinder the output of gasoline and other products.

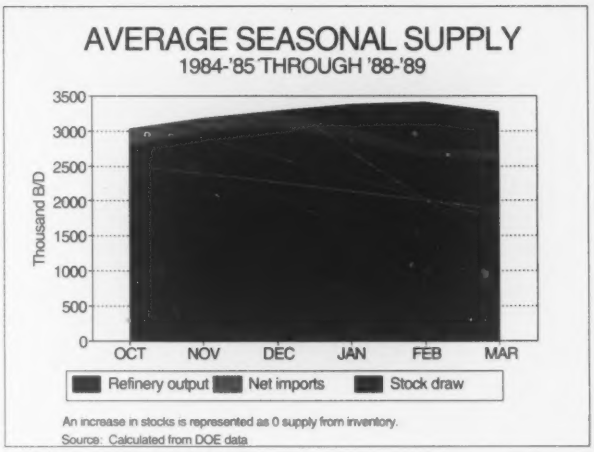
Inventories

Stocks of distillate at the primary level were about 138 million barrels at the end of October, about 9 million barrels above the average of the previous five Octobers. Even if stocks do not rise any further—and typically, they have often risen into November and sometimes December—this would allow for about 350 thousand B/D of supplies, averaged over the remain-









ing five months of the season. This is based on a drawdown to 85 million barrels, the estimated minimum operating level for primary distillate inventories.

Imports

Estimating an upper bound on "net import capability" is a difficult process, and not really necessary for this analysis. Net imports typically satisfy only a small portion of U.S. distillate demand, averaging less than 7 percent over the past five seasons. Even if net imports amount to no more than the 250 thousand B/D observed last season, this, combined with the estimated supply capability from refineries and inventories, would amount to a combined supply capability of over 3.8 million B/D—more than enough to meet deliveries even at the high end of the range discussed above.

There appears little reason for major concern about distillate imports at present, but the roles of the U.S., Iraq and Kuwait in world distillate markets still need to be considered. Although most U.S. demand is satisfied with domestically refined product, America is still one of the world's top distillate importers. In 1989, the U.S. was among the three largest in that category (along with Germany and France). The 304 thousand b/d of gross imports accounted for around 12 percent of total world distillate trade.

Most of the heating oil and diesel fuel that the U.S. imports has come from Western Hemisphere suppliers—primarily Venezuela, Canada and the Virgin Islands (which, although a U.S. territory, is classified as a "foreign" supplier in Department of Energy data). Little or none of these imports has come from Iraq and Kuwait.

Kuwaiti and Iraqi distillates, meanwhile, accounted for slightly less than 5 percent of world diesel and heating fuel exports last year (and only about 1 percent of world consumption). However, along with continued redirection of Saudi product (much of which has been diverted from export markets to satisfy the military needs of Operation Desert Shield), the potential loss could be as high as 2 percent of world distillate consumption and 10 percent of world exports. If the present standstill in the Persian Gulf erupts into war, military demands could become larger (and if military targets include refineries in Saudi Arabia, the disruption could be larger still). Based on analyses such as those of the Department of Energy, available world refining capacity would be capable of providing additional supplies, given adequate sources of crude oil.

Most distillate exports from Iraq, Kuwait and Saudi Arabia had been going to Japan, the Netherlands, Italy and France. This is arguably a moot point in a world market, since all importing countries must bid competitively for available products. The time and expense involved in shipping refined products overseas does, however, tend to soften the link between regional markets to some degree. The two-week voyage from the Americas across the Atlantic provides a buffer in the event of unexpected demand spikes in Europe and likewise partially cushions overseas markets from developments in the U.S. and Canada. Still, prolonged high demand in other importing nations during the winter months could mean more intense competition for sources of world supplies (including supplies from Venezuela, Canada, and the Virgin Islands) and higher demand on world refining capacity.

Conclusion

These calculations must be qualified by the fact that, with the complexity and breadth of the domestic petroleum refining and distribution system, temporary disruptions are always possible. Unexpected disruptions involving refineries, pipelines, or waterways could potentially cause problems on a local or broader scale. Last winter, for example, the Northeast experienced the coldest December on record, while some refineries suffered technical problems resulting from the extreme weather as well as other unanticipated difficulties. Inland water transportation was hindered by ice and low water levels.

Yet, through the extraordinary efforts of refiners, distributors, and heating oil dealers, heating oil customers were supplied. Refinery production surged, inventories were drawn upon at substantial rates, and, in January, distillate imports reached a new monthly record. December's cold was an exceptionally rare occurrence—in fact, according to the National Weather Service, no December has been as cold in the Northeast since record- keeping began in 1895. The likelihood of a recurrence this season is thus quite small.

In sum, given adequate supplies of crude oil and barring unforeseen disruptions, supplies from domestic refineries, inventories, and imports appear adequate to meet demand within ranges likely to be observed, even should the winter be unusually cold. The potential, however, for unanticipated problems in the domestic supply system can never be entirely dismissed from the analysis.